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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/058,406

01/30/2002

Yuji Kawashima

04329.2728

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09/06/2005

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EXAMINER

CZEKAJ, DAVID J

ART UNIT

PAPER NUMBER

2613

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/058,406	Applicant(s) KAWASHIMA, YUJI	
	Examiner Dave Czekaj	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-15 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-9 and 12 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 10 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

On pages 11-13, applicant argues that Chujoh fails to disclose setting an encoding to intra coding according to a condition that that skip number is a predetermined first threshold or more and the quantization scale and code amount satisfy a predetermined condition. While the applicant's points are understood, the examiner respectfully disagrees. See for example Chujoh column 15, lines 17-21. There Chujoh discloses setting the encoding mode to intra when a value $D[i][j]$ is equal to a first threshold $V_NMB+L-1$. Chujoh further discloses in column 14, lines 60-65 that the value $D[i][j]$ is a two-dimensional array that stores information concerning a motion and stationary domain. Chujoh describes in column 14, lines 1-20 that the motion and stationary domain depend on the number of frames which cannot be successively decoded and are therefore skipped from the processing steps, thus making $D[i][j]$ a skip number. The examiner further notes that a broad interpretation can be given to the skip number and predetermined condition since the skip number and predetermined condition are not defined in the claim. Therefore, the rejections have been maintained.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 6-9, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chujoh (US 6,002,802).

As for claims 1 and 7, Chujoh teaches of skip number control section which controls a skip number between frames to be encoded (Chujoh: Column 7, Lines 13-18, 44-50, column 15, lines 17-21); quantization scale control section which controls a quantization scale indicative of a degree of quantization (Chujoh: Column 7, Lines 63-67); an encoding section which performs encoding of a moving picture by selectively using one of an inter-coding type process and an intra-coding type process on the basis of the quantization scale determined by the quantization scale control section and skip number determined by skip number control section (Note: Figure 1 of Chujoh shows the switch (104) being controlled by the encoding controller, the encoding controller decides how many frames to be skipped (101) and whether they should be intra or inter coded depending on the "activity" (See Chujoh Column 10, Column 9, Lines 15-67); a code amount detection section which finds code amount of a frame section which encoded by the encoding section (Chujoh: Column 9, Lines 20-22). Chujoh fails to teach of a storage section which stores the quantization scale with which the encoding section performs encoding by the inter-coding type process, the code amount found by the code amount detection section at this time, the quantization scale with which encoding section performs encoding by the intra-coding type process, and the code amount found by the code amount detection section at this time, however, it is considered obvious to one of ordinary skill in the art at the time of the invention that storage must be required in order to allow the aforementioned data to be compared and analyzed other

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processes. Chujoh also fails to specifically teach that Q scale and code amount meet specific conditions, however, Chujoh Column 7, Lines 12-17 show that changing Q and frame rate (i.e. the amount of code) can result in new frames being added. Further, Chujoh teaches in column 18 that depending on time or long periods without a reference frame the mode is set to Intra. Therefore, it would have been obvious to one of ordinary skill in the art to monitor Q scale as a quick way of determining whether overflow may exist.

As for claims 2 and 8, Chujoh does not specifically teach of the inter-coding type process is at least one of a unidirectional predictive encoding process and a bi-directional predictive encoding process, however, it is considered well known in the MPEG-2 standard that inter-coding is done with unidirectional predictive and bi-directional predictive frames (As cited in Chujoh Column 2, Lines 48-65).

As for claims 3 and 9, most of the limitations of the claim are contained in the above rejection of claim 1. Actual code is representative of $(Q * \text{code})$ which is then processed by the VLC (determines the number of bits to use) which directly effects the skip number of frames (Chujoh: Column 7, Lines 44-58).

As for claims 6 and 12, most of the limitations of the claim are contained in the above rejection of claim 1. Chujoh teaches of an averaging section which finds a mean value the quantization scale determined by the quantization scale control section, wherein the storage section stores mean value obtained by the averaging section as the quantization scale (Chujoh: Column 11, lines 14-20. Note: pre_QP).

Allowable Subject Matter

1. Claims 13-15 are allowed.
2. Claims 4-5 and 10-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Czekaj whose telephone number is (571) 272-7327. The examiner can normally be reached on Monday - Friday 9 hours.

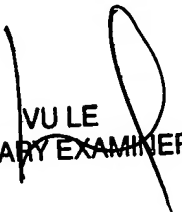
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DJC


VU LE
PRIMARY EXAMINER